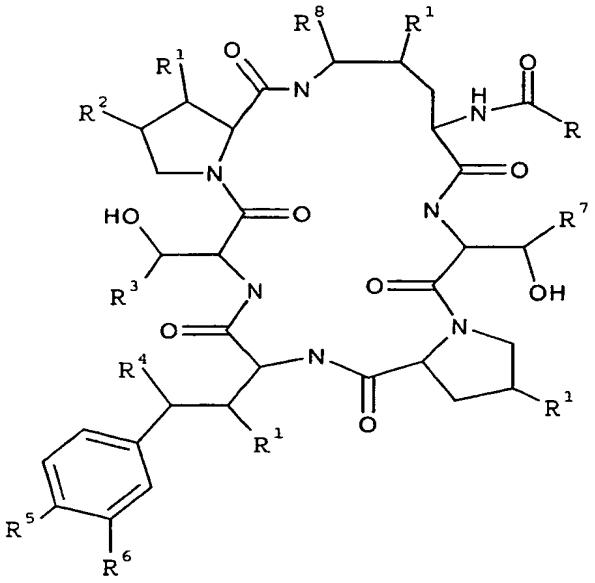
WE CLAIM:

1. A compound represented by structure I



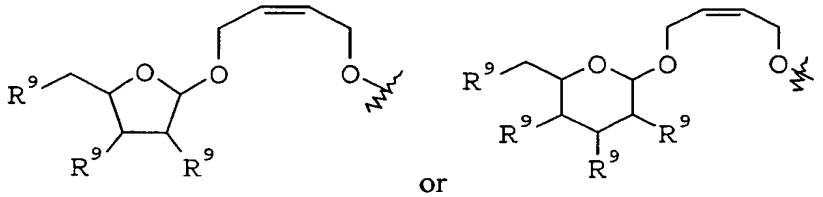
wherein

R is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group;

R^1 is independently -H, -OH or -O-Pg; R^2 is -H, $-CH_3$, $-NH_2$, or -NH-Pg;

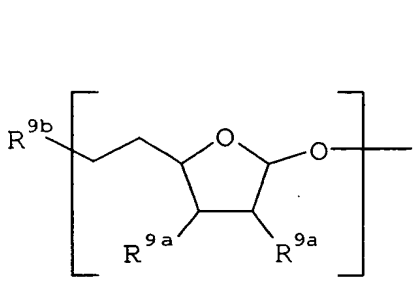
R^3 is -H, $-CH_3$, $-CH_2CONH_2$, $-CH_2CONH$-Pg, $-CH_2CH_2NH_2$, or-CH_2CH_2NH-Pg;

R^5 is -OH, $-OSO_3H$, or $-OPO_2HR^a$, where R^a is hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, phenyl, phenoxy, *p*-halophenyl, *p*-halophenoxy, *p*-nitrophenyl, *p*-nitrophenoxy, benzyl, benzyloxy, *p*-halobenzyl, *p*-halobenzyloxy, *p*-nitrobenzyl, or *p*-nitrobenzyloxy; R^6 is -H, -OH, or $-OSO_3H$; R^7 is -H or $-CH_3$; R^4 and R^8 are independently, hydrogen, or hydroxy and at least one of R^4 and R^8 is a sugar moiety of the formula



or

where R^9 is independently -H, -OH, $-N_3$, -O-Pg, $-NH_2$, -NH-Pg, $-OPO_2R^a$, or a second sugar moiety comprising one to three sugar units selected from the group consisting of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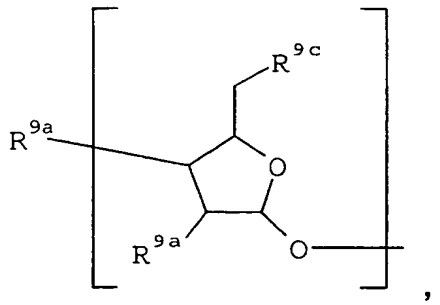
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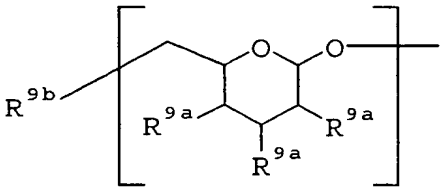
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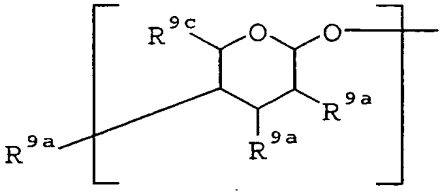
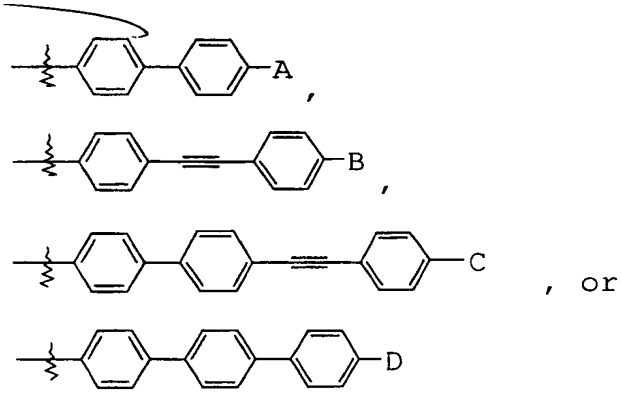

, and mixtures thereof, wherein R^{9a} is -H, -OH, $-N_3$, $-NH_2$, -O-Pg, or -NH-Pg, R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg, R^{9c} is $-CH_3$, $-CH_2OH$, $-CH_2N_3$, $-CH_2OSO_3H$, $-CH_2NH$-Pg, $-CH_2O$-Pg, $-CO_2H$, or $-CO_2$-Pg, where R^a is as defined above, and no more than one R^9 is represented by said second sugar moiety; Pg is a protecting group (i.e., -O-Pg is a hydroxy protecting group, -NH-Pg is an amino protecting group, $-CH_2CONH$-Pg is an amido protecting group and $-CO_2$-Pg is a carboxy protecting group); and pharmaceutically acceptable salts, esters, hydrates or solvates thereof.

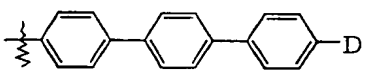
2. The compound of Claim 1 wherein R is

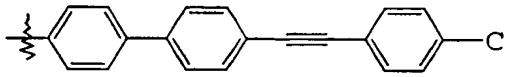

, or

where A, B, C and D are independently hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkynyl, C_1-C_{12} alkoxy, C_1-C_{12} alkylthio, halo, or $-O-(CH_2)_m-[O-(CH_2)_n]_p-O-(C_1-C_{12}$ alkyl) or $-O-(CH_2)_q$-X-E; m is 2, 3 or 4; n is 2, 3 or 4; p is 0 or 1; q is 2, 3 or 4; X is pyrrolidino, piperidino or

piperazino; and E is hydrogen, C_1-C_{12} alkyl, C_3-C_{12} cycloalkyl, benzyl or C_3-C_{12} cycloalkylmethyl.

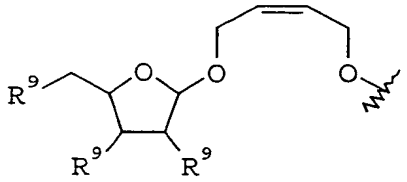
3. The compound of claim 2 wherein R^1 is hydroxy at each occurrence; R^2, R^3, and R^7 are each methyl; R is a moiety of the formula

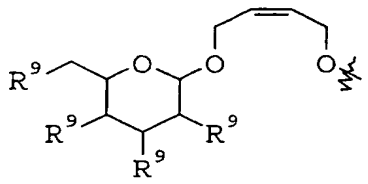


or


;

R^4 is hydroxy; R^5 is $-OPO_2HR^a$, where R^a is C_1-C_4 alkyl or C_1-C_4 alkoxy; R^8 is a sugar moiety of the formula

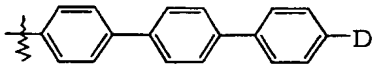


or


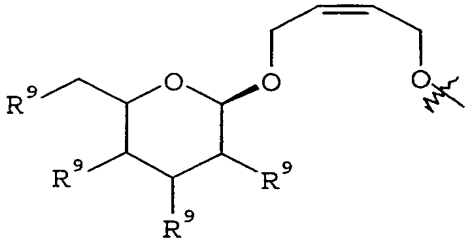
; or

a pharmaceutically acceptable salt or solvate thereof.

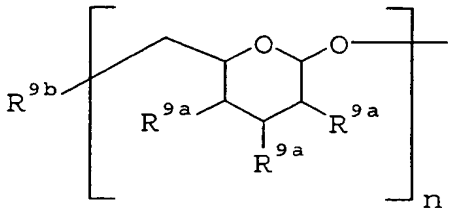
4. The compound of claim 3 wherein R^5 is hydroxy; R is a moiety of the formula



where D is hydrogen or C3-C7 alkoxy; R^8 is a moiety of the formula



where R^9 is independently hydrogen, hydroxy, amino, or a moiety of the formula



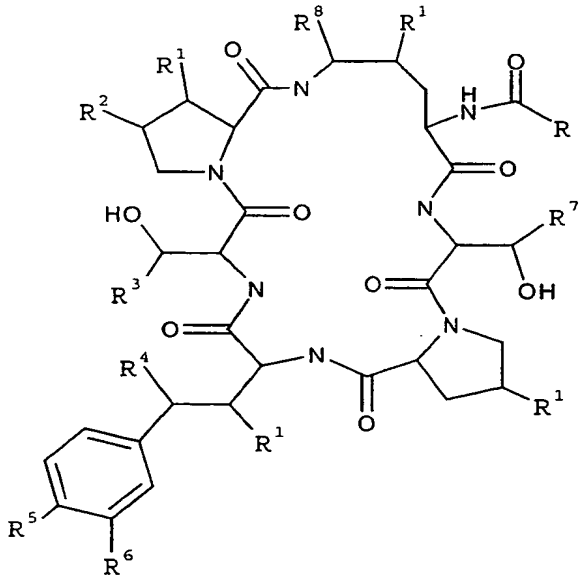
where R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg and n is 1, 2, or 3; or a pharmaceutically acceptable salt or solvate thereof.

5. The compound of claim 4 wherein D is n-pentoxy; R^9 and R^{9a} are independently hydroxy or amino; and R^{9b} is -OH or $-OPO_2R^a$; or a pharmaceutical salt or solvate thereof.

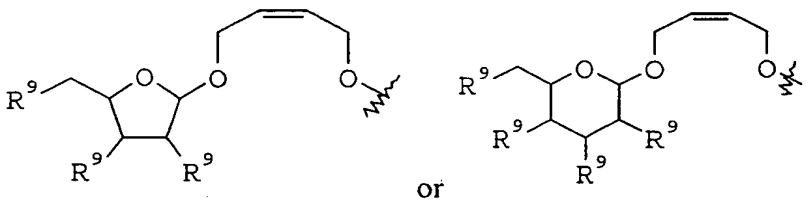
6. The compound of claim 5 wherein R^9 is hydroxy at each occurrence; and R^{9b} is $-OPO_2R^a$, where R^a is methyl or methoxy; or a pharmaceutical salt or solvate thereof.

7. A pharmaceutical formulation comprising one or more pharmaceutical carriers, diluents, or excipients and a compound of claim 1.

8. A method of inhibiting fungal activity comprising administering to a recipient in need of such inhibition an effective amount of a compound represented by structure I:

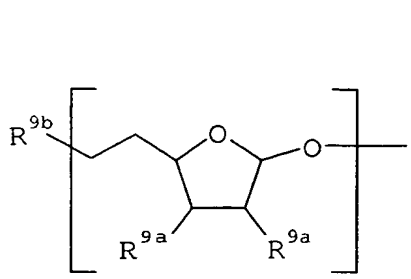


wherein R is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group; R^1 is independently -H, -OH or -O-Pg; R^2 is -H, $-CH_3$, $-NH_2$, or -NH-Pg; R^3 is -H, $-CH_3$, $-CH_2CONH_2$, $-CH_2CONH$-Pg, $-CH_2CH_2NH_2$, or $-CH_2CH_2NH$-Pg; R^5 is -OH, $-OSO_3H$, or $-OPO_2HR^a$, where R^a is hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, phenyl, phenoxy, *p*-halophenyl, *p*-halophenoxy, *p*-nitrophenyl, *p*-nitrophenoxy, benzyl, benzyloxy, *p*-halobenzyl, *p*-halobenzyloxy, *p*-nitrobenzyl, or *p*-nitrobenzyloxy; R^6 is -H, -OH, or $-OSO_3H$; R^7 is -H or $-CH_3$; R^4 and R^8 are independently, hydrogen, or hydroxy and at least one of R^4 and R^8 is a sugar moiety of the formula



or

where R^9 is independently -H, -OH, $-N_3$, -O-Pg, $-NH_2$, -NH-Pg, $-OPO_2R^a$, or a second sugar moiety comprising one to three sugar units selected from the group consisting of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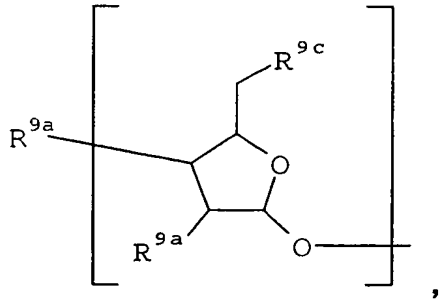
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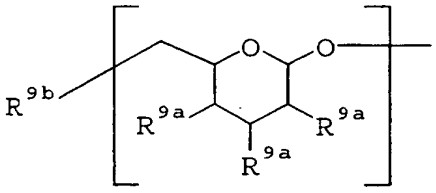
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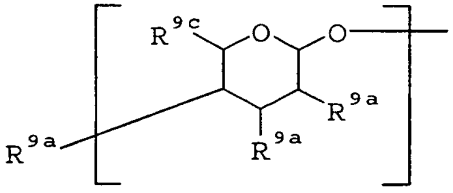
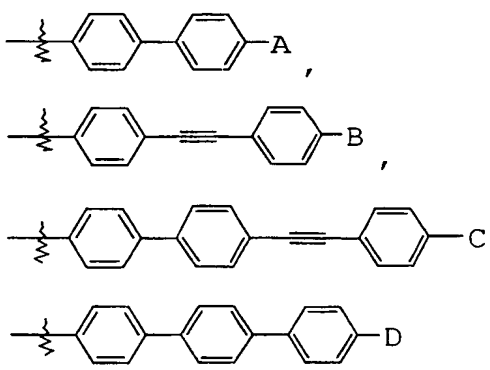

, and mixtures

thereof, wherein R^{9a} is -H, -OH, $-N_3$, $-NH_2$, -O-Pg, or -NH-Pg, R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg, R^{9c} is $-CH_3$, $-CH_2OH$, $-CH_2N_3$, $-CH_2OSO_3H$, $-CH_2NH$-Pg, $-CH_2O$-Pg, $-CO_2H$, or $-CO_2$-Pg, where R^a is as defined above, and no more than one R^9 is represented by said second sugar moiety; Pg is a protecting group (i.e., -O-Pg is a hydroxy protecting group, -NH-Pg is an amino protecting group, $-CH_2CONH$-Pg is an amido protecting group and $-CO_2$-Pg is a carboxy protecting group); and pharmaceutically acceptable salts, esters, hydrates or solvates thereof.

9. The method of Claim 8 wherein R is

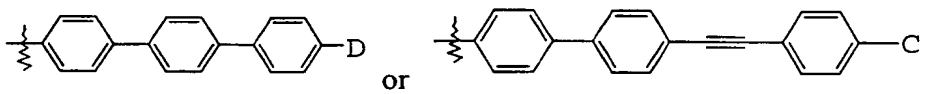

, or

where A, B, C and D are independently hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkynyl, C_1-C_{12} alkoxy, C_1-C_{12} alkylthio, halo, or $-O-(CH_2)_m-[O-(CH_2)_n]_p-O-(C_1-C_{12}$ alkyl) or $-O-(CH_2)_q-X-$

E; m is 2, 3 or 4; n is 2, 3 or 4; p is 0 or 1; q is 2, 3 or 4; X is pyrrolidino, piperidino or piperazino; and E is hydrogen, C_1-C_{12} alkyl, C_3-C_{12} cycloalkyl, benzyl or C_3-C_{12} cycloalkylmethyl.

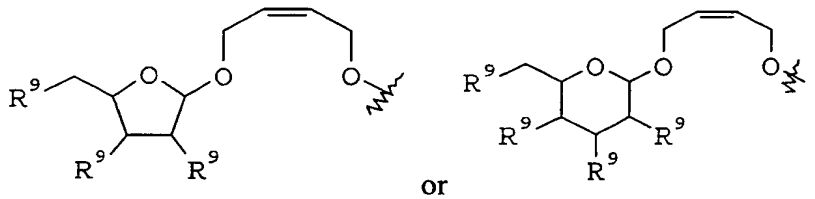
10. The method of claim 8 wherein the recipient is a human.

11. The method of claim 9 wherein R^1 is hydroxy at each occurrence; R^2, R^3, and R^7 are each methyl; R is a moiety of the formula



;

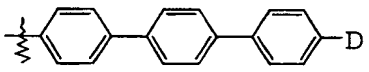
R^4 is hydroxy; R^5 is $-OPO_2HR^a$, where R^a is C_1-C_4 alkyl or C_1-C_4 alkoxy; R^8 is a sugar moiety of the formula



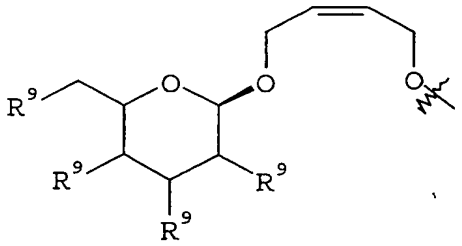
;

or a pharmaceutically acceptable salt or solvate thereof.

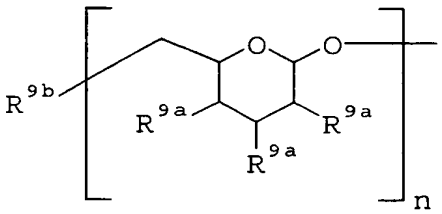
12. The method of claim 10 wherein R^5 is hydroxy; R is a moiety of the formula



where D is hydrogen or C_3-C_7 alkoxy; R^8 is a moiety of the formula



where R^9 is independently hydrogen, hydroxy, amino, or a moiety of the formula



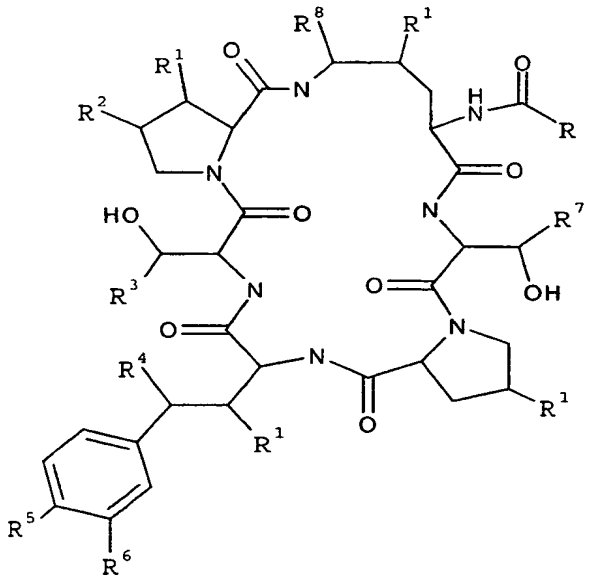
where R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg and n is 1, 2, or 3; or a pharmaceutically acceptable salt or solvate thereof.

13. The method of claim 12 wherein D is n-pentoxy; R^9 and R^{9a} are independently hydroxy or amino; and R^{9b} is -OH or $-OPO_2R^a$; or a pharmaceutical salt or solvate thereof.

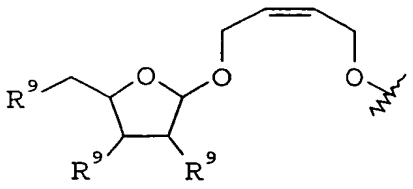
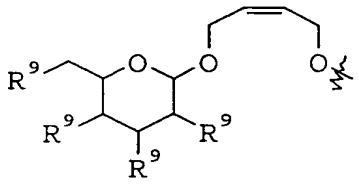
14. The method of claim 13 wherein R^9 is hydroxy at each occurrence; andR^{9b} is $-OPO_2R^a$, where R^a is methyl or methoxy; or a pharmaceutical salt or solvate thereof.

15. The method according to Claim 8 wherein the fungal activity arises from one or more fungi selected from the group consisting of *Candida albicans, Aspergillus fumigatis*, and *Candida parapsilosis*.

16. A method of inhibiting parasitic activity comprising administering to a recipient in need of such inhibition an effective amount of a compound represented by structure I:

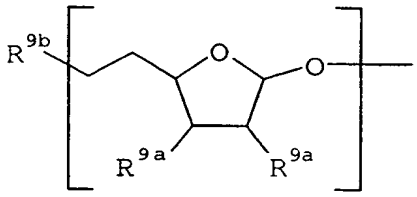


wherein R is an alkyl group, an alkenyl group, an alkynyl group, an aryl group, or heteroaryl group; R^1 is independently -H, -OH or -O-Pg; R^2 is -H, $-CH_3$, $-NH_2$, or -NH-Pg; R^3 is -H, $-CH_3$, $-CH_2CONH_2$, $-CH_2CONH$-Pg, $-CH_2CH_2NH_2$, or $-CH_2CH_2NH$-Pg; R^5 is -OH, $-OSO_3H$, or $-OPO_2HR^a$, where R^a is hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy, phenyl, phenoxy, *p*-halophenyl, *p*-halophenoxy, *p*-nitrophenyl, *p*-nitrophenoxy, benzyl, benzyloxy, *p*-halobenzyl, *p*-halobenzyloxy, *p*-nitrobenzyl, or *p*-nitrobenzyloxy; R^6 is -H, -OH, or $-OSO_3H$; R^- is -H or $-CH_3$; R^4 and R^8 are independently, hydrogen, or hydroxy and at least one of R^4 and R^8 is a sugar moiety of the formula

or

where R^9 is independently -H, -OH, $-N_3$, -O-Pg, $-NH_3$, -NH-Pg, $-OPO_2R^a$, or a second sugar moiety comprising one to three sugar units selected from the group consisting of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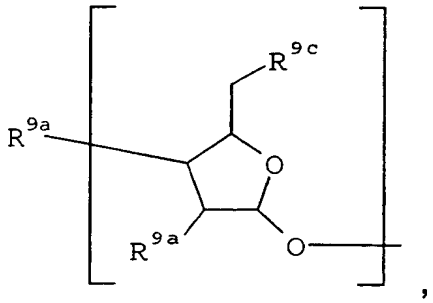
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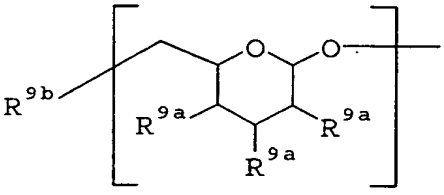
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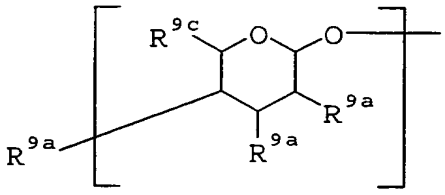
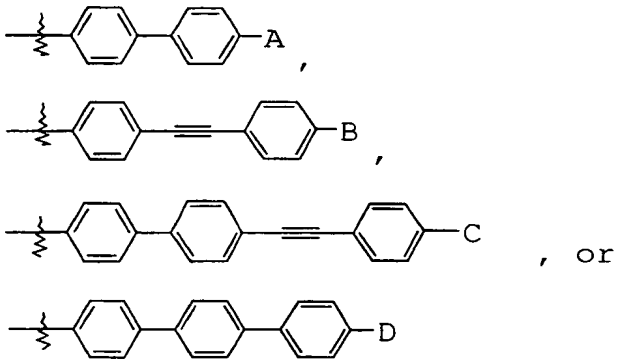

, and mixtures

thereof, wherein R^{9a} is -H, -OH, $-N_3$, $-NH_2$, -O-Pg, or -NH-Pg, R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg, R^{9c} is $-CH_3$, $-CH_2OH$, $-CH_2N_3$, $-CH_2OSO_3H$, $-CH_2NH$-Pg, $-CH_2O$-Pg, $-CO_2H$, or $-CO_2$-Pg, where R^a is as defined above, and no more than one R^9 is represented by said second sugar moiety; Pg is a protecting group (i.e., -O-Pg is a hydroxy protecting group, -NH-Pg is an amino protecting group, $-CH_2CONH$-Pg is an amido protecting group and $-CO_2$-Pg is a carboxy protecting group); and pharmaceutically acceptable salts, esters, hydrates or solvates thereof.

17. The method of Claim 16 wherein R is

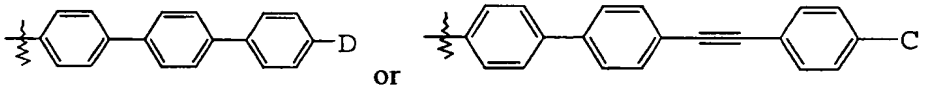


, or

where A, B, C and D are independently hydrogen, C_1-C_{12} alkyl, C_2-C_{12} alkynyl, C_1-C_{12} alkoxy, C_1-C_{12} alkylthio, halo, or -O-$(CH_2)_m$-[O-$(CH_2)_n$]$_p$-O-(C_1-C_{12} alkyl) or -O-$(CH_2)_q$-X-E; m is 2, 3 or 4; n is 2, 3 or 4; p is 0 or 1; q is 2, 3 or 4; X is pyrrolidino, piperidino or piperazino; and E is hydrogen, C1-C12 alkyl, C3-C12 cycloalkyl, benzyl or C3-C12 cycloalkylmethyl.

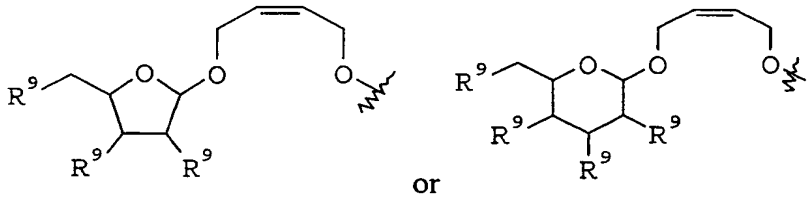
18. The method of claim 16 wherein the recipient is a human.

19. The method of claim 17 wherein R^1 is hydroxy at each occurrence; R^2, R^3, and R^7 are each methyl; R is a moiety of the formula



;

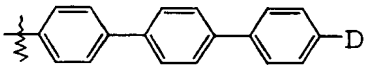
R^4 is hydroxy; R^5 is -OPO_2HR^a, where R^a is C_1-C_4 alkyl or C_1-C_4 alkoxy; R^8 is a sugar moiety of the formula



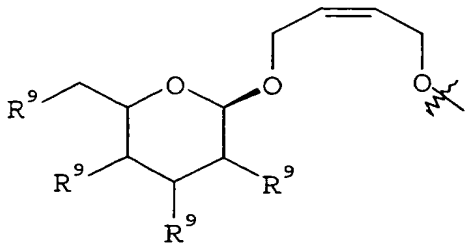
;

or a pharmaceutically acceptable salt or solvate thereof.

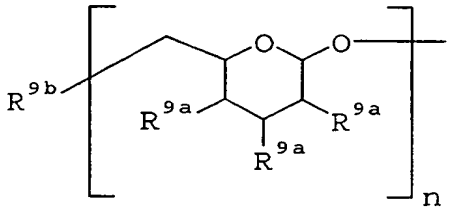
20. The method of claim 19 wherein R^5 is hydroxy; R is a moiety of the formula



where D is hydrogen or C3-C7 alkoxy; R^8 is a moiety of the formula



where R^9 is independently hydrogen, hydroxy, amino, or a moiety of the formula



where R^{9b} is $-OPO_2R^a$, $-OSO_3H$, -H, $-NH_2$, -OH, -O-Pg, or -NH-Pg and n is 1, 2, or 3; or a pharmaceutically acceptable salt or solvate thereof.

21. The method of claim 20 wherein D is n-pentoxy; R^9 and R^{9a} are independently hydroxy or amino; and R^{9b} is -OH or $-OPO_2R^a$; or a pharmaceutical salt or solvate thereof.

22. The method of claim 21 wherein R^9 is hydroxy at each occurrence; and R^{9b} is $-OPO_2R^a$, where R^a is methyl or methoxy; or a pharmaceutical salt or solvate thereof.

23. The method according to Claim 16 wherein the parasitic activity arises from *Pneumocystis carinii*.